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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,903	03/15/2001	Sheng Feng Chien	023925-00002	2925

32294 7590 07/11/2005

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EXAMINER

NGUYEN, STEVEN H D

ART UNIT PAPER NUMBER

2665

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/805,903	CHIEN, SHENG FENG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Steven HD Nguyen	2665	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-13,15-24 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13,15-24 and 26-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/> Paper No(s)/Mail Date <u>2/04</u></p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/> Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|---|

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the amendment filed on 5/16/05. Claims 3, 14 and 25 have been canceled and claims 1-2, 4-13, 15-24 and 26-33 are pending in the application.

### ***Claim Objections***

2. Claim 33 is objected to because of the following informalities: Line 1, "system" should be replaced with – switch --. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-2, 4-13, 15-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanden Heuvel (USP 5751723) in view of Irvin (USP 6678854) and Irvin (USP 5862160 as extrinsic evidence of Irvin '854, See col. 44-53).

Regarding claims 1, 12 and 23, Vanden Heuvel discloses a system and method for encapsulating and decapsulating information into a data packet being transmitted through a plurality of switches (Fig 1) comprising the steps of receiving a data packet in a first switch for transmission to a second switch; encapsulating information into a field of said data packet so that said information, when encapsulated into said data packet, does not increase the size of said data packet; transmitting said data packet having said information encapsulated in said data packet to said second switch (Fig 2, receiving a message packet and encapsulating the background information into the unused bits of the packet to create a enriched packet for transmitting to the next node); receiving said data packet having said information encapsulated in said data packet in said second switch; and decapsulating said information encapsulated in said data packet to determine said information encapsulated in said data packet (Fig 3, extracting the encapsulating background data from the enriched packet). However, Vanden Heuvel fails to disclose said data packet is XOR with said information to performing encapsulating. In the same field of endeavor, Irvin '854 or '160 discloses the information is encapsulated into the data packet by using XOR function (Fig 4A of '854 or Fig 2 of '160).

Since, Vanden Heuvel suggests a method and system for increasing the data of the packet by inserting addition information into the unused bits of the packet. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for using XOR function to encapsulate information into the data packet as

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disclosed by Irvin '854 or '160 into Vanden Heuvel's system and method. The motivation would have been to minimize wasteful expenditures in a wire line system and reduce the cost for the user.

Regarding claims 2, 13 and 24, Irvin '854 and '160 discloses encapsulating information into a field of said data packet further comprises the step of using an encode code book to encapsulate said information into a field of said data packet (Fig 2 of '160, Ref 220).

Regarding claims 4, 15 and 26, Irvin '854 and '160 discloses said information is encapsulated into a Frame Check Sequence field of said data packet (Fig 2 of '160, Ref 228 encapsulates the information into CRC field of the frame and Fig 4a of '854, information is XOR with CRC field).

Regarding claims 5, 16 and 27, Irvin '854 and '160 discloses encapsulating information into said Frame Check Sequence field of said data packet further comprises the step of performing a function on Frame Check Sequence field of said data packet and said information, wherein said Frame Check Sequence field of said data packet is XORed with said information (Fig 2 of '160, Ref 228 encapsulates the information into CRC field of the frame and Fig 4a of '854, the information is XOR with CRC field).

Regarding claims 6, 17 and 28, Irvin '854 and '160 discloses step of decapsulating said information encapsulated in said data packet comprises the step of using a decoding code book to decapsulate said information encapsulated in said data packet (Fig 5 of '160 is a table for using to decode the encapsulated packet in according of Fig 4 of '160).

Regarding claims 7, 18 and 29, Irvin '854 and '160 said information encapsulated in said data packet is decapsulated from a Frame Check Sequence field of said data packet (Fig 5 of

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'160 is a table for using to decode the encapsulated packet in according of Fig 4 of '160 to obtain the secondary information which is encapsulated in the FCS of Fig 4 of '854).

Regarding claims 8, 19 and 30, Irvin '854 and '160 discloses the step of performing a Cyclic Redundancy Check on said data packet to determine if there was an error in transmitting said data packet (Fig 4 of '160, Ref 425 or 430).

Regarding claims 9, 20 and 31, Irvin '854 and '160 discloses the step of determining if an error occurred in the transmission of said data packet (Fig 4 of '160, Ref 425 or 430).

Regarding claims 10, 21 and 32, Irvin '854 and '160 discloses the step of determining an error occurred in the transmission of said data packet if said information encapsulated in said data packet cannot be determined (Fig 4 of '160, Ref 465).

Regarding claims 11, 22 and 33, Irvin '854 and '160 discloses the step of determining an error occurred in the transmission of said data packet if said information encapsulated in said data packet cannot be identified in a decode code book (Fig 4 of '160, Ref 460 and 465).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen  
Primary Examiner  
Art Unit 2665  
6/30/05